

European Investment Bank (EIB)

Luxembourg, 05.07.2021

## **Environmental and Social Completion Sheet (ESCS)**

Overview	
Project Name:	E2I RENEWABLE ENERGY
Project Number:	2017-0046
Country:	Italy
Project Description:	Financing of the construction and operation of 5 new onshore wind farms and the total reconstruction (repowering) and operation of 3 existing onshore wind farms in Central and Southern Italy, for a total capacity of around 165 MW.

Summary of Environmental and Social Assessment at Completion

## EIB notes the following key Environmental and Social outcomes at Project Completion.

The operation was an investment loan for the construction and operation of 8 plants in central and southern Italy, as follows:

NAME	LOCATION	POWER	TYPE OF INTERVENTION
	(town, region)	(MW)	
San Giorgio la Molara	San Giorgio la Molara, Campania	35.0	construction and operation
Montefalcone	Montefalcone di Val Fortore, Campania	15.0	construction and operation
Vaglio2	Vaglio Basilicata, Basilicata	15.0	construction and operation
Mazara del Vallo	Mazara del Vallo, Sicily	15.0	construction and operation
Troia	Troia, Apulia	12.5	construction and operation
IR Abruzzo 1	Castiglione Messer Marino, Abruzzo	39.6	total reconstruction and
			operation
IR Abruzzo 2	Schiavi di Abruzzo, Abruzzo	13.2	total reconstruction and
		10.2	operation
IR Vaglio	Vaglio Basilicata, Basilicata	20.0	total reconstruction and
			operation
TOTAL		165.3	

At appraisal, all wind farms had already obtained all necessary permits on the basis of comprehensive environmental studies including Appropriate Assessments related to sites of nature conservation.

Environmental impacts on all wind farms were assessed as low, negligible or totally reversible in the short-medium term, provided that the envisaged monitoring and mitigation measures were implemented, and concluded that no significant impacts on the integrity of any protected site were to be expected.

The main impacts identified, related to disturbance to some protected bird species living near the wind farms (modification of their natural habitats, and risks of collision); visual impact on the landscape; disturbance for local villages caused by noise and/or flickering, have been adequately mitigated. In particular, the promoter's technical choices of limiting the total number of turbines, reducing their number in the repowering sites, positioning them outside of the main known migration corridors and opting for models with slower rotation speeds and



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higher interdistance, minimised the risk of bird impacts. Moreover, in order to further lower perturbations to the habitats, turbine erections and most heavy works were planned outside of the autochthonous species' nesting and reproductive seasons. The Bank has assessed the forecasted mitigation and monitoring measures as adequate. All projects are aligned with the underlying regional and local planning.

At appraisal, the Bank estimated that the project displaced around 198 kt of  $CO_2$  equivalent per year. The baseline emissions were calculated assuming that the electricity system in Italy was in equilibrium (not high growth) and that RE generation from wind is intermittent. Therefore, it was assumed that the displaced emission would be 75% based on the emission factor of the operating fossil fuel plants (580t  $CO_2/GWh$ ) and 25% based on that of the new builds (CCGT: 354tCO<sub>2</sub>/GWh).

At project completion, the avoided GHG emissions amount to 190 tCO<sub>2</sub>/year, which is slightly below the expected due to the grid curtailments required by the TSO for the sudden drop in electricity demand due to the Covid-19 outbreak during 2020.

## Summary opinion of Environmental and Social aspects at completion:

EIB is of the opinion, based on the reporting from the promoter, that the project has been implemented in line with EIB Environmental and Social Standards, applicable at the time of appraisal.